



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

February 16, 2011
Honolulu, Hawaii

Request to Authorize the Chairperson to Enter Into
Consultant Contract Agreements to Update the Hawaii Water Reuse Survey and Report,
The County Drought Mitigation Strategies, and the Hawaii Drought Plan

SUMMARY OF REQUEST

Staff is requesting that the Commission authorize the Chairperson to enter into consultant contract agreements to update the Hawaii Water Reuse Survey, the County Drought Mitigation Strategies, and the Hawaii Drought Plan. Staff is also requesting that the Commission authorize a total of \$175,000 in funding to complete these three projects.

BACKGROUND

The Commission has a long history of producing reports and investigations which provide guidance for water resource management. In 2004, the Commission completed a survey of the various wastewater reclamation facilities and reuse projects. This culminated in a report: 2004 Hawaii Water Reuse Survey and Report (Reuse Survey). Also in 2004, the Commission completed County Drought Mitigation Strategies (CDMS) for the four counties in Hawaii. In 2005, the Commission completed the Hawaii Drought Plan, 2005 Update (HDP). These three documents have provided the Commission, other agencies, organizations, and the private sector with invaluable information in policy making, planning, and project development and implementation.

The Reuse Survey is a comprehensive study of all public and private wastewater treatment and reclamation facilities in the State of Hawaii. It also includes important information in terms of treatment capacity, level of treatment, reclamation capacity, and any projects for the reuse of the treated wastewater. Since its completion in 2004, there have been changes to the capacity and treatment capabilities of wastewater treatment plants, as well as new plants and reuse projects. Recycled water is an underutilized water resource. This report should be updated in order for the Commission to best manage water resources using the best available information on alternative and non-potable water supplies.

The CDMS were developed by the respective county drought committees to address county and local drought issues, vulnerabilities, and needs using local knowledge and leadership. In developing each of the CDMS, Commission staff and the contractor investigated drought risk and vulnerability, evaluated existing mitigation measures, performed a mitigation gap analysis, and worked with the committees to generate a prioritized list of drought mitigation measures and projects categorized by drought impact

sectors. The CDMS have been used successfully in the past to acquire four million dollars in state funding for project implementation. Some of the drought mitigation projects have been implemented and completed, and these and other changes should be reflected in an updated set of CDMS. The projects have also been listed in the State and County multi-hazard mitigation plans (required for Federal Emergency Management Agency funding).

The HDP was an outcome of statewide drought workshops conducted in 1999-2000. The HDP outlines the State drought leadership structure, identifies key committees, assigns roles and responsibilities, recommends long and short term drought mitigation goals and objectives. The HDP also addresses drought monitoring, forecasting, and impact assessment, drought risk and vulnerability, communication and response, and mitigation and preparedness. The completion of a state drought plan, which is accepted by the U.S. Department of Interior, Bureau of Reclamation, allows the State to participate in Reclamation's emergency drought assistance program without the issuance of the Governor's emergency drought proclamation. Hawaii has received several hundred thousand dollars worth of emergency assistance from Reclamation since the HDP was accepted. Since 2005, there have been several drought events and lessons learned. An updated HDP is necessary in order to maintain drought preparedness using current and best available information, technologies, and methodologies.

PROPOSED PROJECTS

The following projects are recommended to update the subject reports. Project cost estimates are preliminary. Project descriptions are attached to this submittal as Exhibits 1, 2, and 3, respectively.

1. *Update of the 2004 Hawaii Reuse Survey and Report* (estimated cost: \$50,000). This project would include a new statewide survey and investigation of existing, and planned wastewater treatment facilities and projects to reuse the treated wastewater.
2. *Update of the County Drought Mitigation Strategies* (estimated cost: \$50,000). This project would involve collaboration with the respective county drought committees through meetings and/or workshops. The committees would review the 2004 report and to incorporate new information on drought vulnerabilities, mitigation needs, and adaptation strategies. The project would also explore new partnerships and relationships to other organizations, mitigation plans, and funding sources. The product of this project would be four individual county drought mitigation strategies.
3. *Update of the Hawaii Drought Plan* (estimated cost: \$75,000). This project would update the HDP by the inclusion of new information, technologies, and methodologies. The process would involve key drought stakeholders across the state, including members of the Hawaii Drought Council and the County Drought Committees. The project would also evaluate the existing HDP policies and processes in light of lessons learned during several drought events that have occurred since the HDP was completed.

Final scope of services, project cost, and schedule are subject to contract negotiations and available funding. Commission staff will brief the Commission from time to time on the progress of the contracting and project completion. Projects are expected to be completed within 12 months of notice to proceed.

FUNDING

Staff is asking the Commission to approve a total of \$175,000 in funding to complete the three projects described above. Funds would be from the Commissions general fund, special fund, or a combination of both, subject to available funding. Staff may also receive funding contributions from key agencies, organizations, stakeholders or partners.

ENVIRONMENTAL REVIEW (CHAPTER 343, HRS)

The planning studies described herein are exempt from Hawaii's environmental review process under §11-200-5(d), Hawaii Administrative Rules.

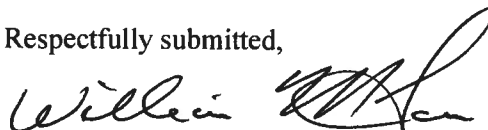
The subject projects are planning studies that identify possible future projects which have not been approved, adopted, or funded. No testing or other actions which may have a significant effect on the environment are involved. Therefore, the proposed action is exempt from Chapter 343, Hawaii Revised Statutes.

RECOMMENDATIONS

1. Staff recommends that the Commission authorize the Chairperson to enter into consultant contract agreements and to approve funding not to exceed \$175,000 to complete the projects listed below. Commission funding would be from general funds or special funds or a combination of both, subject to the availability of funding.
 - *Update of the 2004 Hawaii Reuse Survey and Report*
 - *Update of the County Drought Mitigation Strategies*
 - *Update of the Hawaii Drought Plan*
2. Staff also recommends that the Commission authorize the Chairperson to further amend or modify these contract agreements provided that such amendment or modification does not include any additional funding.

The terms of these agreements will be subject to the approval of the Chairperson and the Department's Deputy Attorney General.

Respectfully submitted,



WILLIAM M. TAM
Deputy Director

Exhibits:

1. *Update of the 2004 Hawaii Reuse Survey and Report*
2. *Update of the County Drought Committees*
3. *Update of the Hawaii Drought Plan*

APPROVED FOR SUBMITTAL:



WILLAM J. AILA, JR

Update of the Hawaii Water Reuse Survey and Report – Project Description (DRAFT)

Scope of Services

Contractor shall update the 2004 Hawaii Water Reuse Survey and Report following the same general report outline and format. The contractor shall complete the following tasks and responsibilities:

1. Investigate and describe all wastewater treatment plants and reclamation facilities in the State of Hawaii including, but not limited to, current design capacity, any plans for expansion, current volume of treated wastewater, system schematic, and reuse service area
2. Identify all projects and available future plans to reuse the treated and recycled wastewater in the State of Hawaii
3. Prepare GIS maps showing locations of wastewater treatment and reclamation facilities and reuse project areas
4. Identify opportunities for future water reuse projects
5. Identify and discuss obstacles that restrict recycled water use expansion and make recommendations to overcome these obstacles
6. Identify opportunities for Federal and State funding for the reuse of recycled water
7. Prepare a draft and final Revised Hawaii Water Reuse Survey and Report

Deliverables/Project Completion Schedule

1. Draft Hawaii Water Reuse Survey and Report / 10 months after notice to proceed
2. Final Hawaii Water Reuse Survey and Report / 12 months after notice to proceed

Update of the County Drought Mitigation Strategies – Project Description (DRAFT)

Scope of Services

Contractor shall update the existing four county drought mitigation strategies. Contractor shall conduct meetings/workshops with the respective drought committees in order to collect information and data needed for this project. In addition to the work items outlined below, the proposed services will also include workshop and meeting facilitation, plan writing, and overall planning assistance. The contractor shall complete the following tasks and responsibilities:

1. Conduct and facilitate up to three county drought committee (CDC) meetings/workshops (in each County) to gather information and complete the tasks below
2. Identify CDC membership and members' roles and responsibilities, including:
 - 2.1. coordination and communication between government agencies and stakeholders
 - 2.2. existing data collection and drought monitoring
 - 2.3. mitigation and response actions
 - 2.4. inter-agency responsibilities and clarify prerequisite agency actions or requirements (e.g., data collection criteria, etc.) to qualify for federal, state, and/or other forms of drought assistance/aid.
3. Evaluate drought risk and vulnerability based on local knowledge
4. Identify existing drought mitigation and response activities
5. Perform a gap analysis to establish drought mitigation needs
6. Identify, describe, and prioritize drought mitigation projects and measures according to local needs
7. Produce draft and final report (one report for each county)
8. Provide travel cost for one Commission personnel to attend meetings/workshops on neighbor islands

Deliverables/Project Completion Schedule

1. Meeting/workshop detailed notes / 4 months after notice to proceed
2. Draft report for each county / 8 months after notice to proceed
3. Final report for each county / 12 months after notice to proceed

Update of the Hawaii Drought Plan – Project Description (DRAFT)

Scope of Services

Contractor shall update the existing Hawaii Drought Plan (HDP). Contractor shall conduct meetings/workshops with the Hawaii Drought Council and other stakeholders in order to determine the parts of the HDP that should be updated and to collect information and data needed for this project. In addition to the work items outlined below, the proposed services will also include workshop and meeting facilitation, plan writing, and overall planning assistance. The contractor shall complete the following tasks and responsibilities:

1. Conduct research into other States' drought plans, the National Drought Mitigation Center, and the National Integrated Drought Information System
2. Revise the overview of drought in Hawaii section, including a new section on climate change and drought in Hawaii
3. Re-evaluate the Hawaii drought program section and make recommendations on organization, leadership, and roles and responsibilities
4. Validate and refine drought stage characteristics for different drought impact sectors.
5. Re-evaluate and refine drought mitigation and response actions to be taken by federal, state, and county agencies.
6. Develop guidelines and a process to determine water use priorities during drought periods, including appropriate response measures
7. Prepare a draft and final Revised Hawaii Drought Plan
8. Provide travel cost for one Commission personnel to attend meetings/workshops on neighbor islands

Deliverables/Project Completion Schedule

1. Meeting/workshop detailed notes / 4 months after notice to proceed
2. Draft Hawaii Drought Plan / 8 months after notice to proceed
3. Final Hawaii Drought Plan / 12 months after notice to proceed